Abstract Of The Disclosure

[0047] Fiber reinforcement rods having a combination of reinforcing fiber members coated with a UV curable vinyl ester resin material and a polybutylene terephthalate/polyether glycol or ethylene acrylic acid topcoat layer. The reinforcing fiber members may be S-type fiber members, E-type glass fiber members, a combination thereof, or E-type glass fiber members and/or S-type glass fiber members with high strength synthetic strands of poly(p-phenylene 2,6 benzoisoxazole fiber members. The topcoat layer provides enhanced properties of specific adhesion, enhanced environmental protection, resistance to surface fiber breakage, and to some degree resistance from delamination. The fiber reinforcement rod permits higher translation of strain energy due to reduced defects and residual stresses to allow a tougher and more resilient cured composite rod to be used. By varying the types of fibers and thickness of the UV coating or topcoat layer, a fiberoptic cable reinforcement rod member that is capable of having a wide variety of tensile strengths and moduli is realized.